



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

HA

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/065,778

11/18/2002

Bryan Metts

30GF-9121

2412

23465

7590

11/28/2006

JOHN S. BEULICK
C/O ARMSTRONG TEASDALE, LLP
ONE METROPOLITAN SQUARE
SUITE 2600
ST LOUIS, MO 63102-2740

EXAMINER

HO, DUC CHI

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,778

Applicant(s)

METTS ET AL.

Examiner

Duc C. Ho

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2 Claims 1-2, 6-10, 14, 21, 15, 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by the Admitted Prior Art in figure 1 of the instant application, hereinafter referred to as the APA.

Regarding claim 1, the APA discloses a programmable logic controller (PLC) wireless communication system 10-fig.1.

providing a central processing unit (CPU) configured for a programmable logic controller (PLC) including a PLC module bus for coupling at least one PLC module to the CPU (a CPU is mounted on the CPU card 14-fig.1 for a programmable logic controller (PLC) wireless communication system 10-fig.1, and a PLC module bus (not shown) is included, see par. 0015);

providing a means for wireless radio frequency communications (a wireless communication module 18-fig.1); *and*

operationally coupling the means for wireless radio frequency communications to the CPU, wherein the CPU is mounted on a backplane of a rack, wherein the means and CPU communicate without using the PLC module bus (the module 18 wirelessly communicates with the CPU (not shown) mounted on the CPU card 14 on a backplane 12-fig.1 of a rack, and the module 18 and the CPU communicate without using the PLC module bus, see 0015-0016).

Regarding claims 2, and 20, the CPU card 14-fig.1 inherently includes a mounted transmitter/receiver.

Regarding claims 6, 14, and 19, the CPU (not shown) mounted on the CPU card-fig.1 comprising a Network Interface Unit.

Regarding claim 7, this claim has similar limitations as claim 1. Therefore, it is rejected under the APA for the same reasons set forth in the rejection of claim 1.

Regarding claim 8, the APA in figure 1 discloses all the claimed limitations: (1) the CPU (not shown) mounted on the CPU card 14-fig.1 comprising means for wireless radio frequency communications; (2) the CPU mounted on the CPU card 14-fig.1 is capable of sending a wireless message to the module 18-fig.1 of the PLC having a CPU and a PLC module bus (not shown) for coupling at least one PCL module to the CPU card, and (3) the CPU card has a mean for wireless radio frequency communications without using the PLC module bus, see 0015-0016.

Regarding claim 9, this claim has similar limitations as claim 1. Therefore, it is rejected under the APA for the same reasons set forth in the rejection of claim 1. The CPU card 14 should include a transmitter/receiver for communicating wirelessly with the module 18-fig.1. The backplane 12-fig.1 includes at least one module connector 16.

Regarding claim 10, the backplane 12-fig.1 comprises a module bus (not shown, see 0015), wherein the CPU mounted on the CPU card 14-fig.1 is capable of communicating with the module 18 connected to the backplane 12 via the module connector 16, and the CPU mounted on the CPU card 14-fig.1 also capable of communicating without using the bus via the transceiver of the CPU card.

Regarding claim 15, this claim has similar limitations as claim 9. Therefore, it is rejected under the APA for the same reasons set forth in the rejection of claim 9.

Regarding claim 21, the CPU(not shown) mounted on the CPU card 14-fig.1 is operationally coupled via its transceiver to another rack having a plurality of slots configured to receive at least one of a power supply, a CPU board, and a controlled input/output module.

Claim Rejections - 35 USC § 103

3 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

4 This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

5 Claim 3-5, 11-13, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the APA, in view of Holmes et al. (US 6,636,749), hereinafter referred to as Holmes.

Regarding claim 3, the APA discloses all claimed limitations, except the module 18-fig.1 (mean) provides a Bluetooth protocol transmitter/receiver.

Holmes discloses method and apparatus for providing power and wireless protocol capability to a wireless device, such as a wireless phone. The Bluetooth module 106-fig.2 should include a transceiver for translation from the Bluetooth protocol to a format compatible with the wireless phone 110-fig.1, see col. 5, lines 9-13.

It would have been obvious to one of ordinary skill in the art, at the time invention was made, to employ a Bluetooth module as taught by Holmes to the module 18-fig.1 of the APA in order to provide a Bluetooth transmitter/receiver. The motivation is to provide wireless communication for short distance.

Regarding claim 4, please see the rejection of claim 3. Holmes discloses IEEE 802.11 protocol transmitter/receiver, see col. 4, lines 37-40.

Regarding claim 5, please see the rejection of claim 3. Holmes provides a cellular protocol transmitter/receiver, see col. 4, lines 41-44.

Regarding claims 11-13, these claims has similar limitations as claims 3-5, respectively. Therefore, they are rejected under the APA-Holmes for the same reasons set forth in the rejection of claims 3-5.

Regarding claims 16-18, these claims has similar limitations as claims 3-5, respectively. Therefore, they are rejected under the APA-Holmes for the same reasons set forth in the rejection of claims 3-5.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 7, 9, and 15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (571) 272-3147. The examiner can normally be reached on Monday through Friday from 7:00 am to 3:30 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (571) 272-3147. The examiner can normally be reached on Monday through Friday from 7:00 am to 3:30 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner



Duc Ho

11-22-06